

Appl. No. 10/708,783
Amdt. dated January 23, 2006
Reply to Office action of October 27, 2005

Amendments to the Specification:

Please replace paragraph [0019] with the following amended paragraph:

In the method of defect control in the present invention, the defect information stored in the database includes the influence degree of yield and the main cause of each defect types. Thus, different actions can be taken for different defect types of the adding defects (the defect type A, defect type B, and defect type C) according to their own influence degrees of yield. For example, according to the influence degree of yield of each defect types stored in the database, killer defects, which have a high influence degree of yield such as defect type A and B, and non-killer defects, which have a low influence degree of yield such as defect type C, are separated in the automatic defect classification 320. Thus, some additional actions can be performed to deal with the killer defects in advance. In the preferred embodiment of the present invention, while a ~~killed~~ killer defect is found, the method of defect control searches the possible root cause in the database according to the detected defect type. For example, the defect type A may be caused by a root cause A in the process B. Then, an alarm 330 is delivered to a corresponding engineer. In the preferred embodiment of the present invention, a defect analysis report is made according to the detected defect type of killer defects and related data, such as the defect type, numbers, locations, and root cause, in the database and delivered to a corresponding engineer by e-mail. Therefore, the engineer can take some proper actions to correct process parameters 340 and solve the excursion case in a very short time. For example, when the database already has enough information for the detected defect type, the engineer can correct the process parameters directly according to the information provided by the database to prevent these defects from occurring again in the next batch of products and judges to abandon or rework this batch of products. If there is not enough information in the database, a manual defect analysis is carried out and the database is updated according to the result of the manual defect analysis.